

January 30, 2002

Paul Lemke  
Wabash Alloys, L.L.C.  
841 South 550 West  
Tipton, Indiana 46072

Re: Source Modification No: **159-14206-00008**

Dear Mr. Lemke:

Wabash Alloys, L.L.C. applied for a Part 70 Operating Permit on March 12, 2001 for a secondary aluminum production source. An application to modify the source was received on March 28, 2001. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) Two (2) natural gas-fired burners, each rated at 16.0 million British thermal units per hour, to replace a burner rated at 24 million British thermal units per hour for existing reveratory furnace #1. Furnace #1 vents to existing north and south baghouses and then through Stacks #2 and #3. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel.
- (b) Two (2) natural gas-fired burners, each rated at 16.0 million British thermal units per hour, to replace a burner rated at 24 million British thermal units per hour for rebuilt reveratory furnace #2. The gas-fired burners will vent through Stack #5. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel. Furnace #2 process emissions vent to the existing north and south baghouses and then through Stacks #2 and #3.
- (c) Seven (7) natural gas-fired ladle heaters/pot stands, rated at 2.0 million British thermal units per hour, each.

The Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call Mark L. Kramer, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,  
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments  
MLK/MES

cc: File - Tipton County  
U.S. EPA, Region V  
Tipton County Health Department  
Air Compliance Section Inspector - Richard Sekula  
Compliance Branch - Karen Nowak  
Administrative and Development - Lisa Lawrence  
Technical Support and Modeling - Michele Boner

## **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY**

**Wabash Alloys, L.L.C.  
841 South 550 West  
Tipton, Indiana 46072**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 159-14206-00008	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 30, 2002

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## SECTION A

## SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary secondary aluminum production source.

Responsible Official:	Paul Lemke
Source Address:	841 South 550 West, Tipton, Indiana 46072
Mailing Address:	841 South 550 West, Tipton, Indiana 46072
General Source Phone Number:	765 - 675 - 6750
SIC Code:	3341
County Location:	Tipton
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source is approved to replace the existing burners, construct new burners and ladles heaters/pot stands and operate the following emission units and pollution control devices:

- (a) Two (2) natural gas-fired burners, each rated at 16.0 million British thermal units per hour, to replace a burner rated at 24 million British thermal units per hour for existing reverberatory furnace #1. Furnace #1 vents to existing north and south baghouses and then through Stacks #2 and #3. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel.
- (b) Two (2) natural gas-fired burners, each rated at 16.0 million British thermal units per hour, to replace a burner rated at 24 million British thermal units per hour for rebuilt reverberatory furnace #2. The gas-fired burners will vent through Stack #5. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel. Furnace #2 process emissions vent to the existing north and south baghouses and then through Stacks #2 and #3.
- (c) Seven (7) natural gas-fired ladle heaters/pot stands, rated at 2.0 million British thermal units per hour, each.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source modification does not include any insignificant activities as defined in 326 IAC 2-7-1(21).

### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## B.1 Definitions [326 IAC 2-7-1]

## B.2 Effective Date of the Permit [IC13-15-5-3]

### B.3 Revocation of Permits [326 IAC 2-1.1-9(5)] [326 IAC 2-7-10.5(i)]

#### B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

- (a) This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the attached affidavit of construction is submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed. An Operating Permit Validation Letter will be issued following the submittal of the affidavit of construction.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section shall be attached to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
  - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
  - (2) If the Part 70 permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
  - (3) If the Part 70 permit has not gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

**SECTION C** **GENERAL OPERATION CONDITIONS**

**C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]**

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

**C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Preventive maintenance records shall be retained for a period of at least five (5) years if the records reflect requirements of the PMP. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2)

years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

**C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**C.4 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.5 Operation of Equipment [326 IAC 2-7-6(6)]**

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

**Testing Requirements [326 IAC 2-7-6(1)]**

**C.6 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]**

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:



Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

#### **Compliance Requirements [326 IAC 2-1.1-11]**

##### **C.7 Compliance Requirements [326 IAC 2-1.1-11]**

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

##### **C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

#### **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

##### **C.9 Emergency Provisions [326 IAC 2-7-16]**

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ,

within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
  - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
  - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
  - (g) Operations may continue during an emergency only if the following conditions are met:
    - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
    - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee

may not continue to operate the affected emissions facilities unless:

- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.11 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]**

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.12 General Reporting Requirements [326 IAC 2-7-5(3)(C)]**

- (a) The reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt,

or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

**SECTION D.1**

**FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]**

- (a) Two (2) natural gas-fired burners, each rated at 16.0 million British thermal units per hour, to replace a burner rated at 24 million British thermal units per hour for existing reveratory furnace #1. Furnace #1 vents to existing north and south baghouses and then through Stacks #2 and #3. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel.
- (b) Two (2) natural gas-fired burners, each rated at 16.0 million British thermal units per hour, to replace a burner rated at 24 million British thermal units per hour for rebuilt reveratory furnace #2. The gas-fired burners will vent through Stack #5. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel. Furnace #2 process emissions vent to the existing north and south baghouses and then through Stacks #2 and #3.
- (c) Seven (7) natural gas-fired ladle heaters/pot stands, rated at 2.0 million British thermal units per hour, each.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

There are no specific conditions applicable to these natural gas-fired burners and ladle heaters/pot stands. All conditions in Sections D.1 and D.2 of the FESOP No. 159-5547-00008, issued December 9, 1996, including those for the reveratory furnaces and control equipment still apply.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: Wabash Alloys, L.L.C.  
Source Address: 841 South 550 West, Tipton, Indiana 46072  
Mailing Address: 841 South 550 West, Tipton, Indiana 46072  
Source Modification No.: 159-14206-00008

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.**

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Affidavit (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Mail to: Permit Administration & Development Section  
Office of Air Quality  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Wabash Alloys, L.L.C.  
841 South 550 West  
Tipton, Indiana 46072

### Affidavit of Construction

I, \_\_\_\_\_, being duly sworn upon my oath, depose and say:  
(Name of the Authorized Representative)

1. I live in \_\_\_\_\_ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of \_\_\_\_\_ for \_\_\_\_\_.  
(Title) (Company Name)
3. By virtue of my position with \_\_\_\_\_, I have personal knowledge of the  
(Company Name)  
representations contained in this affidavit and am authorized to make these representations on behalf of  
\_\_\_\_\_.  
(Company Name)
4. I hereby certify that Wabash Alloys, L.L.C., 841 South 550 West, Tipton, Indiana 46072, completed construction of two (2) natural gas or oxy-fuel fired burners rated at 16 million British thermal units per hour each on reveratory furnace #1, two (2) natural gas or oxy-fuel fired burners rated at 16 million British thermal units per hour each on and rebuilding reveratory furnace #2, as well as seven (7) natural gas-fired ladle heaters/pot stands rated at 2 million British thermal units per hour each on \_\_\_\_\_ in conformity with the requirements and intent of the intent of the Part 70 Operating Permit modification application received by the Office of Air Quality on March 28, 2001 and as permitted pursuant to **Source Modification No. 159-14206, Plant ID No. T 159-00008** issued on \_\_\_\_\_.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

STATE OF INDIANA)  
                                  )SS

COUNTY OF \_\_\_\_\_ )

Subscribed and sworn to me, a notary public in and for \_\_\_\_\_ County and State of  
Indiana on this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

My Commission expires: \_\_\_\_\_.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name (typed or printed)

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for a Part 70 Significant Source Modification

<b>Source Name:</b>	<b>Wabash Alloys, L.L.C.</b>
<b>Source Location:</b>	<b>841 South 550 West, Tipton, Indiana 46072</b>
<b>County:</b>	<b>Tipton</b>
<b>SIC Code:</b>	<b>3341</b>
<b>Source Modification:</b>	<b>159-14206-00008</b>
<b>Permit Reviewer:</b>	<b>Mark L. Kramer</b>

On June 18, 2001, the Office of Air Quality (OAQ) had a notice published in the Tipton County Tribune, Tipton, Indiana, stating that Wabash Alloys, L.L.C. had applied for a Significant Source Modification for the construction and operation of the rebuilt reverberatory furnace #2, four (4) natural gas with oxy-fuel back-up burners and the seven (7) ladle heaters/ pot stands. The notice also stated that OAQ proposed to issue a Significant Source Modification for this operation and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification should be issued as proposed. This document summarizes the public comments and provides the responses of the OAQ.

On July 16, 2001, a petition was submitted with the following comment on the proposed Significant Source Modification. The comment is as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

#### **Comment 1:**

In response to the recent posting by Wabash Alloys, Tipton Co. source modification No. 159-14206, we the undersigned of Tipton County and plant surrounds, object to the issuance of such permit. We respectfully ask for a Public Hearing on this issue as well as an environmental impact study of this area since the inception of the facility and what effect the increase of HAPs and lead, benzene, etc., will have on the future of the area:

John & Jane Reid  
Timothy B. Jamison  
James K. Ploughi  
Jon W. Day  
Tom W. Smith  
Mr. & Mrs. Shannon Olliff  
Robert & Janet King  
Steve Brown

Bret & Melissa Glaze  
Doug Heath  
Richard Johnson  
Morris & Teresa Stillabower  
Kip & Ann Bergman  
Tom & Nancy Williams  
Mark and Carla Simmons

Phone calls were made to the following and they authorized me to sign the petition for them:

Dick & Marilyn Fermung  
Jim Comstock  
Dan McElfresh  
Roger Lamb

John Kwaitt  
John & Rita Gordon  
Jim & Jenny Mahaney  
Paul & Beth Werking



#### Response 1:

The OAQ appreciates the above residents' interest regarding Wabash Alloys' plant in Tipton. A public hearing was held on October 22, 2001. This permit contains conditions that will ensure that Wabash Plant remains in compliance with all applicable State and Federal air regulations and that emissions from the plant will not cause or contribute to a violation of any National Ambient Air Quality Standards (NAAQS).

The federal Clean Air Act requires the U.S. EPA to establish NAAQS for various pollutants at a level that protects public health with an adequate margin of safety. These health-based standards have been established for particulate matter, sulfur dioxide, ozone, carbon monoxide and lead. The IDEM and the U. S. EPA have determined that Tipton County's air quality meets these standards for all of these pollutants.

OAQ has conducted computer modeling using a U.S. EPA approved screening model to assess the air quality impact of emissions from this source. The model examines worst case hourly meteorological conditions and the stack parameters to predict the maximum increase in the ambient concentration of Hazardous Air Pollutants (HAPs) due to this modification. The modeling used the maximum potential emission rate for each individual HAP. Emission rates are listed in the Technical Support Document and this analysis assumed that all emissions will exhaust through the 50-foot stack associated with a reveratory furnace, a worst case analysis, rather than evaluate the dispersion from two (2) separated stacks. These concentrations are compared to the 8-hour OSHA PELs. While the PELs are established to protect health in the work place, they are useful for assessing whether a given pollutant concentration would significantly affect public health. The results are as follows:

	<b>Maximum 8-hr. Concentration (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>OSHA PEL (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Percent of OSHA PEL (%)</b>
Toluene	0.000168	375,000	0.00000005
Benzene	0.000179	3,200	0.000004
Dichlorobenzene	0.0000674	450,000	0.0000001
Formaldehyde	0.00404	1,200	0.0003
Hexane	0.099	180,000	0.00005
Lead Compounds	0.0000337	150	0.00002
Cadmium Compounds	0.0000674	100	0.00007
Chromium Compounds	0.0000842	500	0.00002
Manganese Compounds	0.0000169	1,000	0.000002
Nickel Compounds	0.000118	1,000	0.00001

As shown in the above table the increases in HAPs concentrations are at most three ten-thousandths of one percent (0.0003%) of what OSHA allows in the workplace. The OAQ does not believe that these very small HAPs concentrations would significantly affect public health or welfare .

In addition on July 13, 2001, John Reid, resident of Tipton, submitted comments via telephone on the proposed Significant Source Modification. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

**Comment 1**

Requested a public hearing.

**Response 1**

A public hearing was held October 22, 2001.

**Comment 2**

The plumes from the center of the plant were black today. This condition occurs when the recovery system isn't working. He has noted black plumes several times and seven (7) times this July already. The plumes from the north or south stack are sometimes dark in color.

**Response 2**

The existing permit for the source specifically regulates the opacity to 40% for all plumes from the Wabash Alloys - Tipton Plant. Opacity is defined as the percentage of how opaque the plume is with respect to clear air. Thus, 100% opacity means that one could not see through the plume at all; it is completely opaque.

Wabash Alloys has indicated that any environmental-related concerns can be telephoned directly to the foundry at any time so that Wabash Alloys - Tipton Plant can identify the problem and respond promptly. Their telephone number is (765) 675-6750. Wabash Alloys has indicated that they want to be made aware of any problems at the time their neighbors perceive they are causing a problem so that Wabash Alloys can react on a more timely basis. The IDEM inspector assigned to this foundry source is Richard Sekula. Mr. Sekula can be contacted toll free at (800) 451-6027 from 8:15 a.m. to 4:45 p.m. or at (317) 232-8437 if you suspect that Wabash Alloys is out of compliance with any of the applicable regulations

**Comment 3**

The dust collector whistles overnight. At a previous public meeting held October 1997 when Wabash Alloys purchased this plant (without IDEM, OAQ representation), a Wabash Alloys representative stated that enclosing the pipe with insulation should minimize the noise.

**Response 3**

Although the Department of Environmental Management does not have any authority to address noise, Wabash Alloys has informed IDEM after the hearing that the source of the noise has been identified as being associated with the stack that is connected to the crusher baghouse. Wabash Alloys plans to study the best way to reduce the noise and implement the engineering to accomplish that goal. The work is estimated to be completed by the end of the first by quarter of 2002.

**Comment 4**

He stated that many buildings with gutters have black spots and rust.

#### Response 4

Gutters which are exposed to the weather as well as leaves and debris that fall into gutters do discolor with time in rural and urban areas. Also, the National Ambient Air Quality Standards have a built in margin of safety to address the welfare and the effects of air pollutants on buildings and structures. Tipton County has been designated as an attainment county for all regulated pollutants regulated by the National Ambient Air Quality Standards, i.e., all regulate pollutants already meet all of the National Ambient Air Quality Standards in Wabash County. The U.S. EPA has recently promulgated a new National Emissions Standard for Hazardous Air Pollutants that will reduce the emission of corrosive compounds from Wabash Alloys. Wabash Alloys has obtained a one-year extension from IDEM for compliance under federal law to March 2004.

#### Comment 5

Wafer thin chips of aluminum, the size of half dollars, have been routinely found along side the road and in yards and gardens. These maybe coming off trucks.

#### Response 5

Wabash Alloys has informed IDEM that all trucks incoming to the plant with aluminum scrap are intended to be tarped. It is in Wabash Alloy's best interests financially to minimize material loss during transportation. Wabash Alloys has indicated that they will increase their efforts to prevent debris from coming off incoming trucks and will respond to neighbors' request to retrieve this material. Wabash Alloys has indicated that any environmental-related concerns can be telephoned directly to the foundry at any time so that Wabash Alloys - Tipton Plant can identify the problem and respond promptly. Their telephone number is (765) 675-6750. Wabash Alloys has indicated that they want to be made aware of any problems at the time their neighbors perceive they are causing a problem so that Wabash Alloys can react on a more timely basis.

On July 14, 2001, Morris and Teresa Stillabower, residents of Tipton, submitted the following comments on the proposed Significant Source Modification. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

#### Comment 1:

This is a continuous source of EPA violations with currently outstanding pollution citations. As your pollution experts know, aluminum reclaiming plants like this are a source of several air pollutants that are known carcinogens.

#### Response 1:

Two (2) notices of violation have been issued to Wabash Alloys by IDEM as thoroughly discussed at the hearing. A detailed description is provided in Response 4 in the public hearing comment/response section of this document. These notices are being addressed in an agreed order between IDEM and Wabash Alloys - Tipton Plant.

#### Comment 2:

Wabash Alloys is an eye sore that is reducing the surrounding property values. Their plant is continuously covered in rusting metal structures and soot blackened metal roofing. Their property is filled with weeds and is likely breaking local and state noxious weed ordinances. This plant looks like a trash heap with no obvious care about it.

**Response 2:**

IDEM, OAQ in their permitting review and analysis does not have any authority regarding the appearance of the source, property maintenance or weed control. Please address these concerns to your local government agencies that have jurisdiction on these matters.

**Comment 3:**

This is a source of annoying continuous intra-sound from the blowers and baghouses, etc. Several of the neighbors have complained about interrupted sleep.

**Response 3:**

See Response 3 above to John Reid's comment on noise.

**Comment 4:**

This plant is a source of suspected illness in area surrounding Wabash Alloy's plant. There have been several cases of cancer crop around the vicinity of this Tipton plant. There are several other illnesses. It seems like every nearby household has something to report.

**Response 4:**

See Response 14 in the public hearing comment/response section of this document.

**Comment 5:**

There seems to be evidence (to the casual observer) of several dead and dying trees around their and neighbors' property.

**Response 5:**

See Response 45 in the public hearing comment/response section of this document.

**Comment 6:**

Rumors of animal deaths in the surrounding community are circulating. The holding pond is the rumored source of the problem.

**Response 6:**

The OAQ suggests that the suspicious death of an animal could be investigated by the local Society for the Prevention of Cruelty to Animals (SPCA), the Tipton County Health Department, or a veterinarian. These contacts maybe able to determine possible reasons for the animal's death. Please address all water concerns about the holding pond to the IDEM Office of Water Quality for Tipton County inspector, Doug Alley, at 317-233-2489.

**Comment 7:**

Sometimes during the night they are emitting the smell of burning wires. This would indicate that they are breaking down scrap aluminum contaminated with hydrocarbons. This high temperature breakdown of hydrocarbons produces several really bad substances that are high on the EPA's list of known highly carcinogenic materials.

**Response 7:**

See Response 16 in the public hearing comment/response section of this document.

**Comment 8:**

Contacts in the city of Wabash tell us that Wabash Alloys is having a high degree of labor strife and as a result are operating their Wabash plant at drastically reduced levels (i.e., something like 25% of capacity). It would make more sense from an environmental point of view to solve their problems in Wabash and bring that existing facility up to full capacity before even considering expanding the permits at the Tipton facility.

**Response 8:**

IDEM does not regulate the operations of industry with regard to which plant can produce how much of a given product. IDEM ensures that all plants within the State of Indiana are properly permitted and comply with all technical and health-based standards established by State and Federal law governing regulated air pollutants.

**Comment 9:**

If permits are issued, we plan to take part in any class action lawsuits started by our neighbors that name as negligent in protecting the surrounding environment, the IDEM, Wabash Alloys, or the permit approving Tipton County government agencies.

**Response 9:**

IDEM has held a public hearing and addressed the issues raised during the hearing and in these public comments. See Responses 19, and 20 in the public hearing comment/response section of this document. This final decision is accompanied with a memo outlining the procedures for filing formal objections to this permit.

On October 22, 2001, Monte Morrison, Tipton County Commissioner, submitted the following comments on the proposed Significant Source Modification. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

**Comment 1:**

During my tenure as Tipton County Commissioner, I have received many complaints from neighbors of this plant about its foul emissions. These complaints have continued under the Wabash Alloys operation.

Representatives from Wabash Alloys told these concerned neighbors in a public meeting that emissions would be invisible after they made necessary changes in the operation. I have on several occasions, while farming nearby, witnessed the blackest emissions imaginable.

If the proposed modification will or even might result in poorer air quality for the neighborhood, I urge you to deny the permit.

**Response 1**

See Response 2 to John Reid's comments above. The proposed modification is not being denied because the replacement of the burners and addition of the ladle heaters will comply with all

technical and health-based standards established under Federal and State law and there is no legal basis for denial of this modification which involves combustion of natural gas only.

On July 19, 2001, Kurtis H. Gilliam of ATC on behalf of Wabash Alloys, submitted the following comments on the proposed Significant Source Modification. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

**Comment 1:**

Please change Parts (a) and (b) of Section A.2 and Parts (a) and (b) of Section D.1 to the following:

Section A.2

- (a) Two (2) natural gas-fired burners, each rated at 16.0 million British thermal units per hour, to replace a burner rated at 24 million British thermal units per hour for existing reveratory furnace #1. Furnace #1 vents to existing north and south baghouses and then through Stacks #2 and #3. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel.
- (b) Two (2) natural gas-fired burners, each rated at 16.0 million British thermal units per hour, to replace a burner rated at 24 million British thermal units per hour for rebuilt reveratory furnace #2. The gas-fired burners will vent through Stack #5. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel. Furnace #2 process emissions vent to the existing north and south baghouses and then through Stacks #2 and #3.

**Response 1:**

The equipment descriptions in Condition A.2(a) and (b) as well as in Section D.1 have been changed as follows:

- (a) Two (2) natural gas-fired **burners** ~~with oxy-fuel backup fuel~~, **each** rated at 16.0 million British thermal units per hour ~~each~~, to replace ~~a the~~ burners rated at 24 million British thermal units per hour ~~total for the existing reveratory furnace #1. ,equipped with~~ **Furnace #1 vents to** existing north and south baghouses **and then exhausting** through Stacks #2 and #3. **Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a backup fuel.**
- (b) Two (2) natural gas-fired **burners** ~~with oxy-fuel backup fuel~~, **each** rated at 16.0 million British thermal units per hour ~~each, exhausting to Stack #5~~, to replace a burner rated at 24 million British thermal units per hour for the rebuilt reveratory furnace #2. **The gas-fired burners will vent through Stack #5. Both burners will have the ability to burn oxy-fuel, which is natural gas with oxygen injected into the system to increase the burning efficiency. For the purpose of this permit, oxy-fuel will be considered a back-up fuel. Furnace #2 process emissions vent to the existing north and south baghouses and then through Stacks #2 and #3.**

**Comment 2:**

Wabash Alloys objects to the following terms and conditions in the draft significant Source Modification.

Section B.4

The proposed changes are consistent with IDEM's model and simply ensure that the concepts are stated in a manner that is grammatically correct as follows:

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

- (a) This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the ~~following requirements are met~~
- ~~(a)~~ **The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section verifying in accordance with the following requirements:**
- (1) **If the affidavit verifies** that the emission units were constructed as proposed in the application, the emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed. An Operating Permit Validation Letter will be issued following the submittal of the affidavit of construction.
  - ~~(b)~~ **(2)** If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
  - ~~(c)~~ **(3)** If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards shall be applicable to each individual phase.
- ~~(d)~~**(b)** The ~~Permittee shall receive an~~ Operation Permit Validation Letter from the ~~Chief of the Permit Administration & Development~~ **Permit Review** Section ~~and attach it~~ **shall be attached** to this document.
- ~~(e)~~**(c)** In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
- (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
  - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
  - (3) If the Part 70 permit has not gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

**Response 2:**

The wording and structure of this condition have been revised to the proposed permit as follows:

**B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]**

- (a) This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the ~~following requirements are met~~ (a) The attached affidavit of construction ~~shall be~~ **is** submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section verifying ~~(4)~~ that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed. An Operating Permit Validation Letter will be issued following the submittal of the affidavit of construction.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards shall be applicable to each individual phase.
- (d) ~~The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it~~ **shall be attached** to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
- (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
  - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
  - (3) If the Part 70 permit has not gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

**Comment 3:**

Section C.2.(d)

We object to these terms. The PMP regulations require limited information in the plan and, if records are required, limited record keeping. We question whether these record keeping requirements are within the State's authority. Even if authorized these terms are confusing and, depending upon interpretation, could be burdensome.



**Response 3:**

Condition C.2(d) has been revised as follows:

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

(d) **Preventive Maintenance** Records of preventive maintenance shall be retained for a period of at least five (5) years **if the records reflect requirements of the PMP**. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

Pursuant to 326 IAC 2-7-5(3)(B)(ii) records of supporting information shall be retained for a period of at least five (5) years. The records of Preventive Maintenance are supporting information.

The records need to be retained for a minimum of first three (3) years at the source and for the next two (2) years elsewhere, as long as they are available upon request. After five (5) years, the records no longer need to be retained.

**Comment 4:**

Section C.7

We object on the basis that this provision is duplicative and/or unnecessary. To the extent this Condition describes that State's general authority, it is unnecessary. To the extent this condition describes the State's authority as specifically described in Section D, it is duplicative. To the extent this condition seeks authority beyond the permit terms, or in addition to the State's general authority, we object to this term as beyond the State's authority and creating a term that is arbitrary and capricious.

**Response 4:**

Condition C.7 has been abstracted from the proposed permitted as follows:

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Pursuant to 326 IAC 2-7-6(6), the Commissioner may require other provisions as necessary to show compliance with the applicable requirements stated in the permit. Therefore, IDEM may use enforcement activities to resolve noncompliant stack tests. There will be no changes to this condition in the proposed permit as a result of this comment.

On October 5, 2001, the Office of Air Quality (OAQ) had a notice published in the Tipton County Tribune, Tipton, Indiana, stating that a public hearing will be held on October 22, 2001, at 7:00 PM at the Tipton Public Library, 127 East Madison Street, Tipton, Indiana 46072. The notice also stated that OAQ proposed to issue a Significant Source Modification to a Part 70 source located at 841 South 550 West, Tipton, Indiana 46072. Finally, the notice informed interested parties that all interested parties are invited to be present or to be represented at this meeting.

The following is a compilation of comments and responses as well as the additional information that IDEM alluded to in the hearing that would be provided. The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

The hearing was convened at 7:00 PM on October 22, 2001 at the Tipton Public Library, 127 East Madison Street located in Tipton, Indiana. Paul Dubenetzky, Chief of the Air Permits Branch at IDEM acted as the hearing officer. Nisha Sizemore, a senior environmental engineer in the Office of Air Quality Permits Branch was also present. A transcript was made of the hearing.

#### **Comment 1 - John Reid**

Wabash Alloys purchased US Reduction I think in 1996 or 7, somewhere along that line. US Reduction came into the county nearly ten years ago as part of an EDC project. They were given considerable amounts of money. They were given a new road. They were given tax abatements for ten years, which I suspect if you looked over the books might amount to a million and a half dollars. They came in good faith and told us that they would be welcome partners in the community and they would do everything that they possibly could to be helpful and to keep the environment clean.

Now, when US Reduction was invited into Tipton County by the EDC, there was a gentleman by the name of Jeane Boyer, an outstanding man, a good person who told me a few years ago that is one of the worst votes that he ever made in his entire political life was to vote for US Reduction and for the tax abatement that came about from that. I concur. Most of the people in this room concur. It would be my recommendation that this Board deny Wabash Alloys any permit and that the -- even that the county counsel would go so far as to rescind the tax abatement that is in place and to never give them another tax abatement.

#### **Response 1**

IDEM does not have any jurisdiction over tax abatements or land improvements that were agreed upon at the local level. Taxes and tax abatements are a local issue.

#### **Comment 2 - John Reid**

Records have been kept and I have made phone calls numerous times to officials at IDEM, and kept logs of my own at home about emissions. We have taken pictures of emissions and all this was to be brought to a halt when US Reductions was sold to Wabash Alloys. That was not the case either. The gentlemen that represented Wabash Alloys that night in good faith promised us that they would clean up the stacks, that there would be no more leakage from the gables, that there would be no more noise from a source on the south side of the property. Now, this is a noise which comes from a flute-like apparatus that they have at the south edge of their plant. This is a noise which goes on sometimes two or three days in a row, over night, it goes through the day on Saturday, Saturday night and Sunday, and this is a noise, as you can tell when you listen to this, is very, very distracting. It would be difficult I think to hold this meeting in an atmosphere with this noise in the background for any length of time. So it is with living in the area. It is very difficult to go about one's pace with this kind of noise. It is piercing in the middle of the night. It comes right through the bedroom walls, it wakes me up. There are others in the community that don't hear it. But this is the sound that it makes. I have a friend who lives almost two and a half miles north and we had a corn field up there this summer and I could hear this noise two and a half miles away from the plant. I have hunted mushrooms over around Normanda and have been in the woods and have heard this sound. This -- and our residence is about a mile from the factory. On a low, overcast day and with the wind out of the south, it is even more distracting. It is much, much louder.

## Response 2

The Department of Environmental Management does not have any authority to address noise. Wabash Alloys has indicated that any environmental-related concerns can be telephoned directly to the foundry at any time so that Wabash Alloys - Tipton Plant can identify the problem and respond promptly. Their telephone number is (765) 675-6750. Wabash Alloys has indicated that they want to be made aware of any problems at the time their neighbors perceive they are causing a problem so that Wabash Alloys can react on a more timely basis.

The operating permit regulates the opacity of the plumes from Wabash Alloys to no more than forty percent (40%). If there observations are made that are suspected to exceed forty percent (40%), for example, black completely opaque plumes, contact the inspector, Richard Sekula, toll free at (800) 451-6027 from 8:15 a.m. to 4:45 p.m. or at 317-232-8437.

Although the Department of Environmental Management does not have any authority to address noise, Wabash Alloys has informed IDEM after the hearing that the source of the noise has been identified as being associated with the stack that is connected to the crusher baghouse. Wabash Alloys plans to study the best way to reduce the noise and implement the engineering to accomplish that goal. The work is estimated to be completed by the end of the first by quarter of 2002.

## Comment 3 - John Reid - Jerry Acres

Now, as I understand it, the permit is asking for an increase in lead output from these stacks. Is that the case?

## Response 3

The potential annual lead emissions increase from the modification based on 8,760 hours of operation is only 0.0000626 tons of lead per year, equivalent to 0.125 pounds per year. The modification is to replace the existing burner rated at 24 million British thermal units per hour burner with two (2) new burners rated at 16 million British thermal units per hour each for reveratory furnace #1. In addition, the existing burner rated at 24 million British thermal units per hour will be replaced with two (2) new burners rated at 16 million British thermal units per hour each for reveratory furnace #2. Also seven (7) new ladle heaters are proposed with a rating of 2.0 million British thermal units per hour each for a total of 14 million British thermal units per hour.

Therefore, the existing total rated capacity of natural gas combustion equipment was 48 million British thermal units per hour (24 + 24) and the proposed modification has a total rated capacity of 78 million British thermal units per hour (32 + 32 + 14). Therefore, the net increase in natural gas or oxy-fuel combustion rating is 30 million British thermal units per hour (78 - 48).

The potential emissions presented in Appendix A to the Technical Support Document for the proposed modification were based on the total capacity of 78 million British thermal units per hour. The potential to emit lead in the Technical Support Document on page 3 of 6 was listed as 0.0002 tons per year. Appendix B has been prepared and attached to this TSD Addendum to present the emission calculations for the regulated pollutants based on the net increase of 30 million British thermal units per hour. From this spreadsheet in Appendix B, the potential annual lead emissions increase from the modification based on 8,760 hours of operation is only 0.0000626 tons of lead per year, equivalent to 0.125 pounds per year. Whereas, the potential annual lead emissions from the equipment is this modification (78 million British thermal units per hour) is 0.0001627 tons per year (indicated as 1.627 E-04 in Appendix A), equivalent to 0.325 pounds per year. This amount is approximately one third of a pound of lead per year, if all natural gas combustion units in this proposed modification were operated at full capacity for every hour of the year.

**Comment 4 - John Reid, Jerry Acres, Brent Hollingsworth and Linda Johnson**

How many notices of violation have been issued to Wabash Alloys and are they still pending? How often are inspections by IDEM conducted?

**Response 4**

There are two cases pending which were included in the Citizen Summary handed out at the public hearing. The Office of Enforcement provides information regarding pending cases and closed cases on our web site. The two (2) notices of violations issued to Wabash Alloys during the past eight (8) months were attached to the Citizen Summary.

The IDEM inspector assigned to this foundry source is Richard Sekula. Mr. Sekula can be contacted toll free at (800) 451-6027 from 8:15 a.m. to 4:45 p.m. or at (317) 232-8437 if you suspect that Wabash Alloys is out of compliance with any of the applicable regulations. IDEM generates a schedule that determines when the inspector will visit the source. Inspector visits are unannounced. The IDEM would take enforcement actions if Wabash Alloys were to be found to be in violation of any conditions in this Part 70 Significant Source Modification.

Designated representatives of the IDEM conducted an inspection of the source on May 23 and July 3, 2000. In the first inspection, the source was alleged to have violated four (4) permit conditions. Condition C.11, D.1.5, D.2.1 and D.2.5 of their FESOP. Wabash Alloys is alleged to have failed to take corrective action when the pressure drop across the baghouses controlling emissions from the furnaces and shredder/crusher were outside the normal operating range. Wabash Alloys is alleged to not have operated the baghouse for the shredder crusher at all times.

Designated representatives of the IDEM conducted a second inspection of the source on May 17, 2001 and alleged that a different permit condition was violated. The condition requiring compliance with 326 IAC 6-4-2 is alleged to have been violated by Wabash Alloys allowing fugitive emissions, i.e., those not emitted through a vent or stack, to cross property lines at ground level.

IDEM representatives have conducted twelve (12) surveillances of the Wabash Alloys - Tipton Plant during the past four (4) years on the following dates:

Jan. 29, 1998	Aug. 25, 1999	Oct. 5, 1999	Oct. 13, 1999	Dec. 9, 1999	Feb. 22, 2000
June 23, 2000	Aug. 29, 2000	Jan. 4, 2001	April 16, 2001	May 17, 2001	June 14, 2001

In addition, formal unannounced annual inspections of the Wabash Alloys - Tipton Plant were conducted on the following dates:

Sept. 12, 1997	Nov. 10, 1998	Jun. 22, 1999	May 23, 2000	Jan. 26, 2001	Jan. 15, 2002
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No compliance issues were identified in the January 15, 2002 unannounced inspection.

**Comment 5 - John Reid**

Fines are much easier to pay than it is to change a baghouse. And so these people would rather pay a fine than be compliant with the law.

## Response 5

As IDEM negotiates settlement, beyond those which were pointed out in the Citizen Summary ,IDEM cannot reveal any additional details of the notice of violations until the settlement is reached. The primary goal of IDEM enforcement is to get Permittees back into compliance and have Wabash Alloys stay in compliance. There are a number of factors that go into determining the severity of the fine. The fine is intended to make sure that the Permittee realizes that the company shouldn't violate permit conditions or State of Indiana rules. If a Permittee has violated a rule or permit condition in the past, then the fine for a repeat offense would be higher the second time around. Cost avoidance, which is the money saved by not being in compliance, is taken into account when calculating the penalty. For example, if it is cheaper for the source to operate without the control device, then the penalty includes both any cost avoidance by the company by not being in compliance, and an additional penalty added to be a disincentive for being out of compliance. That process is now going on with our Office of Enforcement. Any permanent, ongoing requirements established in an agreement or as a result of hearing and Commissioner's order will become incorporated into their operating permit. The enforcement order can act outside the permit to make sure that Wabash Alloys complies in the future.

As stated in the Citizen Summary, the IDEM Civil Penalty Policy (Enforcement-99-0002-NPD) is available at <http://www.IN.gov/idem/oe/nrp/civil.html>.

## Comment 6 - Tom Williams

I'm a conservation officer with the Department of Natural Resources and have been for about 27 years. What does "adjacent" mean? Does it mean it has to be connected to the Wabash Alloys property?

## Response 6

Adjacent means either joining or nearby. When there is a requirement for IDEM or somebody else to do something for someone who is adjacent, it has both meanings. IDEM uses the term "contiguous" or "adjoining" if IDEM means property that actually abuts right up against each other. IDEM will provide anyone (whether they are adjacent, nearby or not) who is interested in a permit, notification of this permit decision as well as future permit decisions.

## Comment 7 - Tom Williams

I don't know how much more pollution could come from these seven natural gas-filled ladle heaters/pot stands. I don't know what that means. But I know that you don't really get a lot of smoke from melting lead unless it is dirty lead, has oil and things like that in it.

## Response 7

Wabash Alloys - Tipton Plant is not a lead smelter. There could be lead that is part of the aluminum scrap that the plant uses or lead that comes from certain combustion processes, such as those from the proposed natural gas burners and ladles. The potential annual lead emissions increase from the modification based on 8,760 hours of operation is approximately 0.125 pounds per year. However, the lead from natural gas combustion is not a significant source of lead emissions. Note that smoke is produced by many other processes and is often composed of particulate matter as well as nitrogen and sulfur oxides.

**Comment 8 - John Reid and Tom Williams:**

A plume comes out of the gables that sometimes reaches a quarter to a half a mile.

**Response 8**

Knowing the color of the smoke may assist IDEM in identifying if IDEM needs to modify conditions in a permit. There is not a requirement that an observer never see any smoke at all coming from either the stack(s) or past the fence line. There are limits on the amount of smoke that can exhaust.

One of the alleged violations at Wabash Alloys concerns what emissions can be visible crossing the property line at ground level. The permit contains limits on the amount of smoke that can be visible coming from the stack or the gable so, again, there are some emissions that are allowed by the permit and allowed by law. IDEM's permit and IDEM's inspectors make sure that the Permittee complies with the laws regarding visible emissions, 326 IAC 5 for emissions at the stack and building openings and 326 IAC 6-4 for ground level emissions that are visibly crossing the property line.

**Comment 9 - Tom Williams:**

When inspectors see smoke, black smoke or dark smoke coming out of one of these emission stacks, they have a gauge that they use to determine how dark that smoke is thus determine how much emissions or pollutants are coming out; is that correct?

**Response 9**

The U.S. EPA has developed Method 9 for determining the opacity of smoke. Training is required to become certified to use this method of determining compliance. Every six (6) months the IDEM inspectors must be recertified. A trained eye, without the use of a gauge, can look at black or white smoke and determine how much light it is blocking out. One hundred (100%) percent opacity would be totally black, and one could not see anything behind it. Zero (0%) percent opacity is perfectly clear. In this proposed permit, though, the opacity limit is forty (40%) percent opacity level. That is certainly visible but is not probably the type of black, billowing smoke that people usually complain about.

**Comment 10 - Morris Stillabower**

Are there representatives of Wabash Alloys with us tonight? What are their positions and tell us what you do.

**Response 10**

The representatives from Wabash Alloys identified themselves as: Gary Huddleston, an environmental manager out of Wabash, Paul Lemke, Wabash Alloys - Tipton plant manager, Jim Trail, engineer, Brian Ferguson, traffic warehouse supervisor, and Mitch Ramsay, production supervisor.

**Comment 11 - Morris Stillabower**

What is Wabash Alloys' track record for paying their fines and penalties? Are they coming in on time or are they a good actor or bad actor on paying their fines?

### **Response 11**

There is no routine system for payment of fines. A fine is paid when IDEM has an enforcement order. In most cases, an agreement between IDEM and the company is worked out that specifies how much the fine is. IDEM enters into an agreement to ensure future compliance and that the fine is paid at the time. If an agreement cannot be reached, a Commissioner's order (subject to a hearing) will establish the means of coming into compliance and the associated penalty. An order can establish stipulated penalties so that if something happens in the future the owner of a source will automatically pay a fine. Stipulated penalties do not protect the Permittee from any future enforcement action, it just means automatically the Permittee has to pay a fine, even prior to being notified by IDEM of a violation.

### **Comment 12 - Morris Stillabower**

Does Wabash Alloys have attorneys involved fighting the fines?

### **Response 12**

Wabash Alloys has attorneys involved in resolving the enforcement action and coming to an agreement on what Wabash Alloys - Tipton Plant will do to come into compliance and how much will be paid in fines.

The end agreement is of course a public record. The ongoing enforcement matters are worked out best when the agency and the company discuss what they are going to do.

### **Comment 13 - Morris Stillabower**

Has Wabash Alloys threatened IDEM with any kind of lawsuits or anything? Is there any pending litigation against the State from Wabash Alloys?

### **Response 13**

At this time, Wabash Alloys has not threatened IDEM with any lawsuit nor is there pending litigation against the State. Wabash Alloys has objected to conditions in permits IDEM has issued for their various foundries. Wabash Alloys has appealed previous permit decisions and IDEM has subsequently resolved those by agreeing to slightly different wording in certain permit conditions.

### **Comment 14 - Morris Stillabower**

Has the Tipton County Health Department conducted a health audit of the surrounding community? I would be concerned if they are looking for cancers and other health problems that might be impacted by the air and water emissions of this kind of an operation. I know in the neighborhood there has been quite a few illnesses reported around the plant, and I am wondering if anybody has statistically looked for a relevance to the health of the community, and I would like to personally see that be done. I don't know if we can talk to the Health Department of Tipton County to do that or not, but I think that should be an indication of whether or not we have legitimate concerns or not. If we could prove a statistical relevance to the vicinity of the plan, we would have something to be concerned with. If we didn't find a statistical relevance of the health of people then maybe they are a better actor than some of us in the community believe.

### **Response 14**

IDEM is not aware of whether or not the Department has conducted an audit. The local health

department is independent of IDEM. This question should be pursued with the Health Department of Tipton County.

**Comment 15 - Morris Stillabower**

My main concern is not the visible smoke that I can see from this kind of an operation, but it's those invisible chemicals that are emitted from this kind of operation. I believe that acronym is OPHs.

**Response 15**

PAHs - They are polycyclic aromatic hydrocarbons.

**Comment 16 - Morris Stillabower**

When the aluminum that is being broken down is contaminated with organic materials like paints, rubbers, electrical insulation like you would find on wire, cutting oils like you would find from a machine operation at Chrysler, etcetera, any of the organic materials. The smell of this class of carcinogens that is known to be most deadly, I understand is like that of burning wires, like an electric motor that's gotten too hot or a transformer that's burnt up. On many nights when Wabash Alloys is operating through the night time, we in the neighborhood have noticed these kinds of smells emitted from their factory.

Why should we proceed allowing Wabash Alloys to continue to operate when they are emitting these kinds of smells and whether or not -- IDEM has actually physically monitored for these kinds of chemicals that are known to be so dangerous, how can IDEM in good consciousness issue a continuation of the permits to keep operating until we find out whether or not this is truly a problem?

**Response 16**

The U.S. EPA recently adopted a new rule that applies to secondary aluminum facilities, such as Wabash Alloys plants. In case of Wabash Alloys - Tipton Plant, Wabash Alloys will need to come into compliance with the applicable provisions of the new rule by March 2004. There are two (2) sets of requirements. Some facilities that accept very oily scrap have a special operation where they essentially burn that oil off and the new National Emissions Standard for Hazardous Air Pollutants (NESHAPs) would have a specific set of requirements for that operation.

Note that in 1993, 1994 and 1995, the former U.S. Reduction plant performed tests to determine whether or not the reveratory furnaces and the crusher/shredder were in compliance with the allowable Particulate matter emission limits pursuant to 326 IAC 6-3-2. All three (3) performance tests approved by IDEM substantiated that the plant was in compliance with the allowable particulate matter emission rates.

**Comment 17 - Morris Stillabower**

These chemicals are particularly more produced when the temperatures are that of melting metal or when they are being burned off, so just the operation of burning off the materials at those kinds of temperatures is enough to produce these organic chemicals. As far as the lead goes, many alloys of aluminum that are being sold as scrap are alloy with lead and it is done for various reasons like machinability. Lead brings in various kinds of mechanical properties to the metal and it is one alloy that is naturally found in small percentages even in pure alloys of lead. And lead can be found in cutting oils and some of the other materials that are combined as scrap coming back to such an operation. That might be a source -- potential source of lead. It is according to the kind of scrap that they are melting down.



### **Response 17**

Most lead is emitted from facilities like this as fine particulate matter that is collected by a baghouse. The new federal rule will require Wabash Alloys to improve their baghouse collection system and install additional monitoring to ensure that the baghouse(s) operate properly. The source will have to commit to a schedule to begin construction and do interim steps up to and including coming into full compliance by March 2004. The federal government and the Clean Air Act has promulgated that rule to address the first step of your concern about controlling sources of hazardous pollutants. Under current rules, lead emissions from Wabash Alloys are low and lead concentrations in the ambient air are well below the health-based National Ambient Air Quality Standard for lead.

### **Comment 18 - Morris Stillabower**

Particularly during times of rainfall, the PAHs combined significantly with the rainfall and the farther you get away, the less of it you are going to find. So up close to the plant you can find these chemicals in the soils surrounding. You should be able to march out at given distances and be able to plot and find smaller and smaller amounts of these classes of chemicals as you radiate away from the center of the building. So I would be interested in IDEM doing this kind of a soil sampling search looking for this class of chemicals to see if it is actually a concern to us or not. If we don't find it, then that would be -- obviously would be something that we would mark off our list as something we might have concerns with.

The other thing that seems to point to the potentiality of hazardous chemicals is the death of vegetation surrounding the plant. As you move away from the plant you find healthier and healthier vegetation. As you move closer to the plant, you find more and more defoliated trees and those kinds of things. I would be interested in knowing what is producing this herbicide effect on the surrounding plant life also.

### **Response 18**

The proposed modification to replace and install natural gas combustion units does not require either soil sampling or wet deposition dispersion modeling to quantify the PAHs from these proposed facilities. The rules under which this approval is granted do not provide for these types of analyses.

### **Comment 19 - Morris Stillabower**

As an officer of the IDEM, I'm curious about what your personal responsibility as to carrying out the status of the environmental laws of this State? What exactly are your personal liabilities as an officer of the State?

### **Response 19**

Paul Dubenetzky is Chief of the Air Permits Branch of IDEM and IDEM's liabilities are to issue permits that ensure compliance with the State rules and would withstand an appeal. Any permit IDEM issues has to be done legally. If IDEM did something inappropriately, too strict on the applicant's side, they can appeal. If IDEM does something that's less strict than the law requires, someone else could appeal. So everyday IDEM's staff tries to make sure that they do their jobs properly and issue a permit that's the best possible permit IDEM, OAQ can issue under law and is a legal -- a proper legal decision. The public hearing held with the public oversight helps make sure IDEM does that.

**Comment 20 - Morris Stillabower**

Is Mr. Dubenetzky personally protected by the law of the State of Indiana as an officer of the State so that he is personally not liable in a lawsuit against -- if the citizens of the county bring lawsuits? If Mr. Dubenetzky is not doing his job properly, is Mr. Dubenetzky protected by the law of Indiana? I know that in cases of water rights laws, that State officials are protected by the State of Indiana so they cannot personally be implicated in the decision-making that they make. I was curious if you fall underneath that same kind of category?

**Response 20**

The Indiana Tort Claims Act [ I.C.34-4-16.5-1 et seq] bars action against governmental employees that are functioning within the scope of their employment. Coghill v. Badger (1981) 418 N.E.2d, rehearing denied 430 N.E.2d 405.

**Comment 21 - Beth Werting**

One of my horses is elderly and last year started losing his hair. So the first thing you are thinking is it lead? So there is a sense that probably all of us live with a certain apprehension, founded or not founded. Is this caused by our good neighbors? You know, are we living in a pollutant -- you know, those things are still invisible to us, are we being exposed to that? Are our livestock being exposed to that? Are our food crops being exposed to that? Those are concerns.

We deal with slag up and down the road all the time. You know, just the aluminum particles that we have to pick up are just a nuisance for the lawn mower. This is the second bucket we have done this year. It's just that the good neighbor approach, even though I feel I am a trusting person, does not fly anymore. And at this point we are trying to sell our home and I don't know what we will tell the people who are going to be buying it. We can't tell them that we have good neighbors.

**Response 21**

The Clean Air Act, the U.S. EPA and the State regulate ambient air quality. The air we breathe or the air that affects crops or would affect animals that graze on crops in a number of different ways. There is a National Ambient Air Quality Standard (NAAQS) for lead. It is based on health-based criteria that the U.S. EPA has developed that demonstrate that a certain level in the air will not adversely affect public health or welfare. In the case of lead, it's 1.5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), maximum arithmetic mean averaged over a calendar quarter, below which will not adversely affect public health or welfare. The NAAQS for lead has an adequate margin of safety built into the standard.

Public health is making sure the air you breathe yourself does not affect one's health due to air contaminants. Public welfare is the effect of air pollution, including deposition, on crops or animals that graze on the crops.

As discussed at the hearing, the lead emissions from the proposed replacements and new installations of natural gas-fired combustion units have been conservatively modeled by using the emissions from stacks #2 and #5 and grouping all of the lead emissions from the burners and ladles together. The potential to emit lead from the proposed modification is 0.0002 tons per year as stated on page 3 of 6 of the Technical Support Document for this modification. The potential to emit lead from the existing U.S. Reduction Company based on the Technical Support Document as stated on page 3 of 10 for FESOP (159-5547-00008) issued on December 9, 1996 was 0.04 tons per year prior to this modification.

The stack parameters for stack #2 were listed in Table A of the Technical Support Document for FESOP whereas the stack parameters for stack #5 were listed on page 2 of 6 of the Technical Support Document. These parameters have been abstracted and are listed in the following table:

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
#2	Reverbatory Furnace #1	60.0	4.0	50,000	250
#5	Combustion Only Two (2) burners for Reverbatory Furnace #2	50.0	4.0	37,000	700

The U.S. EPA SCREEN dispersion model was used to compute the short-term lead concentrations at or beyond the minimum site boundary distance from the closest stack of 64 meters (210 feet). The adjustment factor from 1 hour to quarterly (8,760 hours /4 or 2,190 hours), is 0.12 times the hourly concentration.

The emission rate of lead from the proposed modification only was 0.0002 tons per year which is equivalent to 0.00000576 grams per second. The emission rate of lead from the existing entire source was 0.04 tons per year, equivalent to 0.00115 grams per second.

The following maximum one (1) hour concentrations were predicted based on stack #2 or stack #5 for two (2) scenarios, just the modification and the entire source.

Description	Emission Rate (grams/second)	Stack #	Maximum 1-Hour Concentration ( $\mu\text{g}/\text{m}^3$ / $\text{m}^3$ )	Maximum Quarterly Concentration ( $\mu\text{g}/\text{m}^3$ / $\text{m}^3$ )
Modification Only	0.00000576	5	0.000320	0.00004
Modification Only	0.00000576	2	0.0001182	0.00001
Existing Source	0.00115	5	0.06386	0.00766
Existing Source	0.00115	2	0.03629	0.00435

Therefore, the maximum quarterly predicted lead concentration of  $0.00766 \mu\text{g}/\text{m}^3$  from the existing source exhausting all through Stack #5 is only 0.51% or approximately one-half of one percent of the lead NAAQS of  $1.5 \mu\text{g}/\text{m}^3$  / $\text{m}^3$ .

#### Comment 22 - Jerry Acres

Enlighten me a little bit on how the monitoring process works. In other words, is Wabash Alloys allowed to emit so many pounds per year, and how is that monitored?

#### Response 22

Compliance monitoring for the source requires that the baghouses are operating properly. The original 1996 permit required a stack test to measure the amount of particulate matter coming out of the stack, and compare it to the limits set in the permit. Wabash Alloys did a stack test and passed the stack test, that is, the actual emission rate was less than that allowed by the permit.

IDEM looks at the way the baghouse operates. In this case, there is a pressure drop range across the baghouse that indicates whether or not it is operating properly which has to be checked once

per shift. Since Wabash Alloys passed the stack test, IDEM relies upon the stack test results to verify the range that defines the normal operation that is incorporated into the permit. When Wabash Alloys operates the baghouse within the range as established by the stack test, then IDEM has a reasonable assurance that the source will remain in compliance.

The actual emission standard is in pounds per hour of pollutant. The emission standard in their existing permit (FESOP) is a pound per hour standard that is developed to make sure that they are a minor source as well as demonstrating compliance with the applicable particulate matter rules.

**Comment 23 - Jerry Acres**

Does IDEM or Wabash Alloys perform the testing? What safeguard is there to indeed assure us that Wabash Alloys is indeed following the criteria that is set up by IDEM?

**Response 23**

The U.S. EPA has developed standard methods for performing these types of stack tests. Those methods are specified by the permit. Wabash Alloys is responsible for having the stack test done, but must also submit a stack test protocol to IDEM prior to performing the stack test. The protocol documents how Wabash Alloys plans to perform the test and how their protocol conforms to the stipulated U.S. EPA and IDEM requirements. This protocol must be approved by the IDEM. The stack test is required to be conducted when the facilities tested operate at full capacity or at least no less than ninety-five (95%) percent capacity.

If the protocol is approved, then Wabash Alloys is required to inform IDEM when they plan on performing the stack test. Most of the time, IDEM will have staff member(s) observe the test. Generally, the sources do not perform the stack test. In this case, Wabash Alloys hired a contractor. Usually IDEM is familiar with the contractors that are hired. IDEM observes the test to make sure that both the test is being performed properly while the testing staff is out in the field and also to see that the operation is normal during the test.

**Comment 24 - Jerry Acres**

But basically a lot of the policing is done by Wabash Alloys then?

**Response 24**

That is correct. In addition, IDEM, OAQ as mentioned above in Response 4 to the public hearing comments, conducts surveillance and inspections of the source to verify that Wabash Alloys is in compliance with all conditions in their permit.

**Comment 25 - Jerry Acres**

Here is my question. Why is it at 2 AM I can be laying in my bed and be awakened by a terrible odor which smells just like the odors that the gentleman has described here? The noise is an ongoing thing. And it seems like at different times periodically through the months that they will do heavier smelting at night to where there is actually when I get up in the morning, like I said, I have lived out there almost five years now, and on the west side of my house which is facing Wabash Alloys, when I notice this strong odor, I will also notice residue on my siding and periodically a cloudiness on my pool water. I have real concerns when I smell that and I see that, it tells me something is there. Now, you know, there again, you may say it is not harmful, I'm not convinced of that because -- and it seems like this happens and I'm sure some others can attest to this, it seems like it happens mainly late at night when I'm sure atmospheric conditions are such, but I have actually

driven by that plant sometimes at night and it is scary some of the amounts of smoke and such that is coming out of that stack.

I'm not accusing anybody at Wabash Alloys or saying that they are shielding it, what I am asking them is if there more smelting going on at night which would cause this problem?

#### **Response 25**

The permit conditions do not specify any differentiation between daytime and nighttime operations. Production levels at Wabash Alloys are essentially constant during a given day. All potential emission calculations assumed maximum capacity at 24 hours per day. Compliance with all permit conditions is not dependent upon time of day and in fact IDEM will inspect and survey sources during nighttime conditions unannounced.

Atmospheric conditions very much affect the dispersion of air pollutants, odors, and noise. Poor dispersion results in higher levels of all three (3) concerns. Late night and early morning hours are often times when the atmosphere is not well mixed, resulting in poor dispersion. The information used by IDEM to demonstrate compliance with ambient air quality standards is based on all types of atmospheric conditions. This includes the meteorological data used in computer modeling as well as the concentration of pollutants measured by instruments that operate throughout the day.

#### **Comment 26 - Jerry Acres**

Will this proposed modification allow Wabash Alloys - Tipton Plant to increase their production? Will Wabash Alloys smelt more product? Or is this to clean up the problem they have?

#### **Response 26**

The proposed permit will not allow Wabash Alloys to increase their production. The proposed burners are a replacement of the existing burners. The new burners do add additional heat, but no additional metal will be melted. The proposed ladle heaters will make sure that whatever metal has been melted remains molten in the ladles, is properly cured and that there is no moisture in the ladles when the molten aluminum is poured. The heaters in the ladles provide the necessary heat to prevent the metal from solidifying before pouring.

The two (2) aluminum reverberatory smelting furnaces with a capacity to melt 19,900 pounds of aluminum scrap and dross each had specific PM and PM<sub>10</sub> hourly emission limits in their existing Federally Enforceable State Operating Permit (FESOP) F 159-5547-00008. In addition, the FESOP limits the total source-wide emissions of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC to less than one hundred (100) tons per year each, a single HAP to less than ten (10) tons per year and the combination of HAPs to less than twenty-five (25) tons per year. These source-wide limits continue to moderate the actual increases that can occur due to year-to-year variations in operations and production.

#### **Comment 27 - Brent Hollingsworth**

I would like more information on the data sheets, the hazardous emission data sheets provided to the employees of that plant.

#### **Response 27**

As mentioned above, U.S. EPA promulgated a new rule to address hazardous air pollutants from secondary aluminum smelters. The potential HAPs emissions listed in Federally Enforceable State Operating Permit, (FESOP 159-5547-00008) issued to U.S. Reduction Company have been

abstracted from page 3 of 10 of the Technical Support Document and listed in the following table:

<b>HAPs</b>	<b>Potential To Emit (tons/year)</b>
Chlorine	0.18
Cadmium Compounds	0.02
Chromium Compounds	0.04
Hydrogen Chloride	2.03
Manganese Compounds	0.15
Nickel Compounds	0.04
Lead Compounds	0.04
<b>TOTAL</b>	<b>2.50</b>

The above table does not appear to include the quantities of hazardous air pollutants from natural gas combustion. The following table has been abstracted from the Technical Support Document for this proposed modification and accounts for all of the natural gas combustion associated with the two (2) reveratory furnaces and the proposed ladle heaters:

<b>HAPs</b>	<b>Potential To Emit (tons/year)</b>
Benzene	0.0007
Dichlorobenzene	0.0004
Formaldehyde	0.024
Hexane	0.586
Toluene	0.001
Lead Compounds	0.0002
Cadmium Compounds	0.0004
Chromium Compounds	0.0005
Manganese Compounds	0.0001
Nickel Compounds	0.0007
<b>TOTAL</b>	<b>0.614</b>

Wabash Alloys maintains Material Safety Data Sheets (MSDSs) at the foundry and these are available to the employees for the products and chemicals used at the source. MSDSs can be reviewed at the foundry by making arrangements with the plant manager at 765-675-6750.

**Comment 28 - Doug Heath**

We experienced a problem with a well that suddenly went dry after there were some modifications,

there was something that was done at this facility. And it's my understanding that probably some other people in the area have had well problems and I know there has been a lot of talk about lead in the air, there hasn't been a whole lot said about water, but I am concerned about the water quality. We were concerned when we noticed all the vegetation that we recently planted in the area, the evergreen trees that were there, how short of a life span that they had. We have been concerned over the years because of the flame type and the glow that we see coming from these stacks oftentimes late at night. Very suspicious.

We're concerned that this is not an appropriate area for this type of facility, and having spoken with other neighbors in the area, when this facility first was going in we were totally unaware about it. We would have certainly objected at the time and I think anything to facilitate this operation further or anything that would enable them to expand their operation would be a serious mistake. I am concerned about the number of times that they have already been cited and fined and their seemingly lack of responsibility to the community. I am concerned because they are a larger company and typically these large companies are -- they're concerned about their bottom line which is money, they are not here with our safety in mind and the environmental integrity of the area. I think that along with this pollution aspect that we're talking about internally, I questioned whether or not their employees inside the facility are actually safe, whether or not these employees receive some sort of blood test to check if they are contaminated with lead, if they are contaminated with carcinogens, what it might be doing to the employees, let alone what it is doing to our area. And if there is unresolved issues with fines and other irregularities, you know, I would vehemently object to doing anything to further facilitate their operation.

#### **Response 28**

As far as it being an appropriate area, again, that's a local issue regarding zoning. Employee health is under the jurisdiction of the Occupational Safety & Health Administration of the Department of Labor. Please address all water concerns about the holding pond the IDEM Office of Water Quality for Tipton County inspector, Doug Alley, at 317-233-2489.

The Indiana Department of Natural Resources implements the provisions of Indiana law that are relevant if a high capacity user adversely affects that ability of others to obtain water. More information about those provisions can be obtained by contacting Mark Basch at (317) 232-4160.

See Response 45 in the public hearing comment/response section of this document with regard to the growth of trees.

#### **Comment 29 - Morris Stillabower**

Which alloys does Wabash Alloys ship from their operation? Are they A380 or A383?

#### **Response 29**

Mr. Paul Lemke of Wabash Alloys responded that it is A380 family of alloys, which would include 383.

#### **Comment 30 - Morris Stillabower**

What are the alloy contents for shipping? They are basically melted down pop cans most of the time and other things thrown in, but there is quite a percentage variation on the alloys themselves. It is a very forgiving alloy, a lot of people use it. I was also interested in knowing what is the predicted amount of poundage per year difference going to be out of Wabash after the improvements? In other words, what percentage are they going to increase by the amount of products shipped with

these improvements they make? Are they going to be shipping 20 percent more alloys, the same amount of alloy by a pound basis?

**Response 30**

The replacement of the burners and installation of ladle heater will not change the make-up of the alloys. There will be no increase in shipping or capacity of the metal melted at the Wabash Alloys Plant due to the proposed modification. However, due to orders from Wabash Alloys' clients, no month's production is exactly the same as the next month's production. Thus, the maximum capacity of Wabash Alloy's production remains the same as it is now even if the modification is implemented.

**Comment 31 - John Reid and Linda Johnson**

It baffles me a little that these Wabash Alloys - Tipton Plant keeps their own records on how the baghouse is doing and how much pollutants the stacks are emitting. Maybe the State needs to step in here and maybe show up a couple times unannounced per week or month and kind of see what the numbers look like.

**Response 31**

All of IDEM's inspections are unannounced, can take place during any month of the year, on any day of the week and during any time of the day, but most are conducted during normal daylight hours and occasionally at night. See also Response 4 in the public hearing comment/response section of this document.

In the existing FESOP, Condition B.24 (Inspection and Entry) allows IDEM, OAQ and U.S. EPA upon presentation of identification access to the source's premises to inspect, at reasonable times any facility, equipment, including monitoring and air pollution control equipment, practices, or operations regulated or required under the FESOP.

Dick Sekula is the IDEM inspector currently responsible for Wabash Alloys - Tipton Plant.

**Comment 32 - John Reid**

Let me say that if the baghouse is checked and a figure is unacceptable, but the number that the company actually writes down is the acceptable number, does that seem like that would be possible?

**Response 32**

It is not impossible, but there is a difference between the nature of a violation that a Permittee reports in accordance with its permit and a violation that the Permittee attempts to conceal by falsifying information. In the first instance, the IDEM will take administrative action against the company. The second case is also subject to criminal prosecution. Criminal penalties can result in much more serious consequences for the permittee.

**Comment 33 - John Reid**

Does IDEM ever find that someone from a company knowingly falsifies information that they provide to IDEM? Actually do people stoop that low?

**Response 33**

IDEM has an Office of Criminal Investigations who has filed criminal charges against individuals in



companies that have falsified records. The knowledge that criminal action can be taken serves as a major deterrent.

**Comment 34 - John Reid**

Could you look at Page 2, the one that has the chart that says emissions and calculations and so forth? And I talked to a gentleman, he is an outstanding person by the way, Dick Sekula, that mentioned to me that it looks to him like there is an increase in what he calls HAPs. I have never heard of that word.

**Response 34**

HAPs is an abbreviation for Hazardous Air Pollutants. See Response 45 in the public hearing comment/ response section of this document.

**Comment 35 - John Reid**

Are those HAPs creating ozone or do they have some nasty effect on air? See the second table in Response 27 in the public hearing comment/response section of this document.

**Response 35**

The Clean Air Act established 187 different compounds as being hazardous air pollutants. Most of them are organic, including PAHs, which are the one class that is regulated as an organic. The rest of the HAPs for the most part are metal compounds. In the table in the Technical Support Document, the hazardous air pollutants listed were benzene, formaldehyde, hexane and toluene. These HAPs are also called volatile organic compounds because each is an organic compound. The chromium compounds and manganese compounds are generally emitted as particulate matter so they get counted up in the particulate matter as well. The volatile organic compounds in the summertime do contribute to ozone pollution as part of a chemical reaction that happens in the atmosphere.

The actual increase in HAPs is given in Response 3. There will be a very small amount of additional HAPs from the ladle heaters and increased rating of the replacement burners.

**Comment 36 - John Reid**

How many fines has Wabash Alloys paid?

**Response 36**

At this time, no fines have been paid by Wabash Alloys as the enforcement actions are still ongoing.

**Comment 37 - Morris Stillabower**

I understand that a baghouse only catches the particles of soot as in smoke, so you would have to have a fairly thick molecule to be caught in the baghouse, and that other organic vapors and gasses would not be caught by the baghouse if they are in the gaseous form and a simple molecule. Is that true? So any kind of pollution that they emit from the plant is going to escape, that's a non-particulate organic material then such as some of the PAHs?

### **Response 37**

At Wabash Alloys, lime is injected into the baghouse. The fact that the gas has to go through this cloth filter that is coated in lime dust, means that the lime can take out sulfur dioxide. Sulfur dioxide is one gas. Acid type gasses can be controlled by a baghouse when lime is injected. The existing permit requires that the operating temperature of the baghouse be below 400 degrees Fahrenheit. It is important because there are some constituents, most metal compounds, especially from secondary aluminum smelting, that exist at a gas temperatures greater than 400 degrees Fahrenheit. They would pass through the baghouse. When the baghouse is at a lower temperature, below 400 degrees Fahrenheit, a greater amount of these compounds exist as particulate matter, are collected by the baghouse, and are not emitted to the atmosphere. Most of the organics that were previously mentioned above are not being collected by the baghouse. See the second table of Response 27.

### **Comment 38 - Morris Stillabower**

Would a stack washing system catch those kinds of chemicals?

### **Response 38**

The type of system that is utilized to destroy those types of chemicals is a device to incinerate or thermally destroy organic rather than a scrubber. When U.S. EPA developed their standards for this type of source, they found that the organic levels from the reverbatory furnaces were not high enough to be effectively controlled by that type of system. The area where incineration would destroy these organic chemicals is in special operations where oil or grease is burned off of the scrap before it ever goes into the reverbatory furnaces and the new NESHAP addresses what is required. But with relatively clean scrap going into a reverbatory furnace, the emission levels and concentrations are quite low.

### **Comment 39 - Morris Stillabower**

I understand that there is a chlorine system in this plant for treatment of certain kinds of scrap, what kind of pollution could we expect from the chlorine operations that are involved in the plant? I believe it is a gaseous chlorine.

### **Response 39**

There can be gaseous chlorine used as a flux. The emissions would either be a chloride or an acid gas. Chloride forms when the chlorine gas reacts with the impurities in the molten aluminum to form chlorides that either go into the slag or are captured or exhausted through the baghouse. Sodium chloride (NaCl) is an example of a chloride that is a particulate matter that would be collected by a baghouse. The acid gas which forms could be controlled by lime injection in the baghouse.

### **Comment 40 - Morris Stillabower**

Are certain compounds of chlorine responsible for the ozone damage?

### **Response 40**

There are two different concerns about ozone. Volatile organic compounds that stay in the lower atmosphere (troposphere) where we breathe react with sunlight and other gaseous compounds to form ozone, a pollutant which has a National Ambient Air Quality Standard. Some chlorinated hydrocarbons do contribute to ozone formation, but many do not.

In the upper atmosphere (stratosphere), there are higher natural concentrations of ozone which shields us from the ultraviolet light coming from the sun. Certain chemical compounds, such as Freon and other chlorofluorocarbons can get up into the upper ozone layer and destroy the ozone that is protecting ultraviolet light.

**Comment 41 - Morris Stillabower**

Are there any chlorine-based materials that attack that upper atmosphere ozone layer coming from a plant like this?

**Response 41**

There is a list of ozone depleting substances, and to the best of IDEM's knowledge, there are none directly emitted as a result of Wabash Alloy's process emissions. As part of the Part 70 Operating Permit that Wabash Alloys is applying for, a specific condition addresses the use and reduction of such substances in air conditioners and appliances. This condition is as follows:

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

**Comment 42 - Morris Stillabower**

Is there a gas ACI leaving the plant?

**Response 42**

The term acid gas is equivalent to HCl. Both hydrogen chloride gas and hydrochloric acid will be emitted from the plant. The baghouse uses lime injection which is an effective control of acid gasses.

**Comment 43 - Morris Stillabower**

Does the lime injection require moisture to operate properly?

**Response 43**

The lime can either be injected as a slurry or in dry powder form. If injected as a slurry, the water vapor evaporates, and the lime gets deposited on the baghouse bags.

**Comment 44 - Nancy Williams**

In light of the previously stated comments at this hearing why would IDEM approve this proposed permit? We have got a problem with the way it is right now, why make it worse?

#### **Response 44**

IDEM relies on the national ambient air quality standards which protects the air you breathe, damage to crops, and even deposition on water (deposition is the term used to describe the process of depositing particulate matter on the surface of the earth). U.S. EPA has developed those standards. For example, lead quarterly concentrations should not exceed 1.5 micrograms per cubic meter. This is the level of lead that can exist in the ambient air and not cause any health problems. IDEM has examined the modification, and by extrapolation the entire Wabash Alloys, does not cause a violation of that standard. See Response 27.

#### **Comment 45 - Nancy Williams and Linda Johnson**

Is this normal for a type of operation like theirs in other locations that you can drive by their facility and see the paint peeling off the building and you can see dead trees around the facility and the farther away you get the less you see of it? Is this normal?

#### **Response 45**

There can be multiple reasons why paint peels from a building, such as weathering, rotting wood, poor maintenance and improper preparation of the wood prior to painting. An arborist or the agricultural extension service could be contacted to determine what types of problems are affecting a local stand of trees. Therefore, there is no way without a detailed investigation to determine whether that trees around a given area are dying due to industrial operations.

#### **Comment 46 - Richard Johnson**

What is the objective to modification if there is no increase in production and an increase in pollution.

#### **Response 46**

The application is to replace existing burners with burner with a higher rated capacity, and install new ladle heaters, both of which do not increase the production capacity of the furnaces or the source. The intent of installing new burners is that they have newer technology, and therefore will result in more efficient utilization of the natural gas.

#### **Comment 47 - Jerry Acres, Jerry Stillabower and Doug Heath**

Is the purpose of this hearing to review their permit or increase the pollution output on their existing permit? Will Wabash Alloys have more emissions, is that a part of what they are asking for?

#### **Response 47**

The purpose of this hearing is to review and answer questions concerning the proposed modification and the rationale used by IDEM in determining whether or not to approve the proposed permit.

The burners covered by this proposed permit are replacement burners that will be more efficient and would use less gas to provide the same amount of heat to melt the same amount of metal. In that regard, there would probably be an actual decrease in pollution because one burns less natural gas to melt the same amount of metal. The additional burners for the ladle heaters and increased capacity of the replacement burners for the furnaces would increase the amount of air pollutants slightly as shown in the following tables abstracted from pages 1 and 2 of Appendix B to this document. The increase in rated capacity of the burners and ladles over the existing rated natural

gas combustion is 78 - 48 million British thermal units per hour, or 30 million British thermal units per hour.

<b>Pollutant</b>	<b>Increase In Potential To Emit (tons/year)</b>
PM	0.238
PM <sub>10</sub>	0.951
SO <sub>2</sub>	0.075
VOC	0.688
CO	10.5
NO <sub>x</sub>	12.5

<b>HAPs</b>	<b>Increase In Potential To Emit (tons/year)</b>
Benzene	0.0003
Dichlorobenzene	0.0002
Formaldehyde	0.009
Hexane	0.225
Toluene	0.0004
Lead Compounds	0.00006
Cadmium Compounds	0.0001
Chromium Compounds	0.0002
Manganese Compounds	0.00005
Nickel Compounds	0.0003
<b>TOTAL</b>	<b>0.236</b>

**Comment 48 - Morris Stillabower**

Will this Clean Air Act and the action of IDEM ask and encourage Wabash Alloys in the future to continuously drop their emissions, or will their emissions remain a steady state by these new laws or will they increase?

**Response 48**

The new National Emission Standard for Hazardous Air Pollutants will reduce the emissions of hazardous air pollutants. Wabash Alloys' pending application to move into the Title V Operating Permit program will make the Federal Compliance Assurance Monitoring rule applicable. The Title V Permit will include provisions from both rules that will further ensure continuous compliance with the applicable emission limitations. Also the IDEM's enforcement action is intended to improve operating practices at the plant. These actions should all have the effect of reducing emissions from the Wabash Alloys Tipton Plant.

**Comment 49 - Morris Stillabower**

Is IDEM committed to making that happen?

**Response 49**

IDEM is committed to having all sources comply with the law. The law also provides that Wabash Alloys could apply for an increase in production or to add furnaces to the plant as long as the addition complies with all the State and Federal rules.

**Comment 50 - Morris Stillabower**

Is Wabash planning for future expansion yet?

**Response 50**

Wabash Alloys - Tipton Plant has submitted an application to IDEM to go from their FESOP to a Part 70 Operating Permit. Their Federally Enforceable State Operating Permit limits their emissions so that they are not considered a major source, less than one hundred (100) tons per year of PM<sub>10</sub>, SO<sub>2</sub>, VOC, NO<sub>x</sub>, CO and less than ten (10) tons per year of an individual hazardous air pollutant and twenty-five (25) tons per year for a combination of hazardous air pollutants. Therefore, Wabash Alloys has applied to move from this permit system that requires them to be a minor source to a permit that would allow them to be a major source.

**Comment 51 - Morris Stillabower**

Would that application allow Wabash Alloys - Tipton Plant to be able to increase the size of the production?

**Response 51**

Wabash Alloys - Tipton Plant has applied to be allowed to become a major source instead of a minor source. Before U.S. EPA did all their research and promulgated the new NESHAP for this type of a facility, there was very little information available as to how much hazardous air pollutant emissions, specifically HCl, would be emitted from this type of facility. U.S. EPA has revised their method of estimating the amount of HCl emissions from this type of plant. Wabash Alloys requested and received an extension to the compliance date and applied for a Part 70 Operating Permit since the plant will now be major for HAPs. Wabash Alloys application is not requesting an increase in actual emissions; it is because IDEM now has a more accurate calculation to quantify HCl emissions.

**Comment 52 - Morris Stillabower**

So what they are really wanting to do then by going to a major emitter classification is not be caught up in the web of the laws that limit a minor source then? So they don't want to be caught under that regulation of a minor source because they won't meet that?

**Response 52**

Until the application is processed and all the implications from the new NESHAP are taken into account, IDEM cannot quantify whether or not the current actual emissions from the plant operations exceed the minor source thresholds for HAPs.

**Comment 53 - Linda Johnson**

Wabash Alloys wants to replace burners and possibly put in a new burner to burn ladles off. The burners aren't actually what creates all the pollution, right, is it the process controlled by the baghouse?

**Response 53**

The main source of the emissions is from the melting of the metals in the furnace, not the combustion of the natural gas that is melting the metal in the first place.

**Comment 54 - Linda Johnson**

How long does a bag in a baghouse last under normal operations? Would it last a year under the right conditions? I mean you only check it once a year. Are there any inspections or regulations that have them checked on a regular basis?

**Response 54**

The bags in these baghouses typical last one and a half (1.5) to two (2) years. These baghouse are included in Wabash Alloys existing Federally Enforceable State Operating Permit (FESOP). In addition, the pressure drop across the baghouse shall be recorded once per shift. The pressure drop is an indication of possible problems. Lower than normal pressure drop is an indication of leaks. Higher than normal pressure drops are an indication that bags may fail. Leaking or failed bags decrease the effectiveness of the baghouse.

The FESOP also requires that Wabash Alloys visually inspect the inside of the baghouse once per week (Condition D.1.8 of F 159-5547). A minimum of one hundred (100) bags are required to be kept on the plant premises. In the event that a bag failure is observed, the affected compartment will be shut down immediately until the units have been replaced. The exhaust temperature into the baghouse shall not exceed 400 degrees Fahrenheit and lime shall be continuously fed into the baghouse.

**Comment 55 - Doug Heath and Brent Hollingsworth**

Is Wabash Alloys also proposing to install additional heaters?

**Response 55**

The proposed modification calls for the addition of seven (7) natural gas-fired ladle heaters rated at 2.0 million British thermal units per hour for a total of 14 million British thermal units per hour.

**Comment 56 - Doug Heath**

When Wabash Alloys - Tipton Plant goes from this minor situation to this major situation, what else does that entail them to do besides giving them the legal right to put out more pollution? Increase production?

**Response 56**

The application to move into the Title V program for major sources is in response to better emissions information being made available by the U.S. EPA than what was available when the minor source permit was issued in 1996. The Title V permit will reconcile limitations on hydrochloric acid

emissions with this new information. All applicable requirements from the new national emissions standard for hazardous air pollutants will be incorporated into that permit with a future compliance date of March 2004.

There was no limitation on production in the existing FESOP. The plant is currently allowed to operate at full capacity.

**Comment 57 - Doug Heath**

Does this transition from a minor status to the major status essentially take the pressure off of Wabash Alloys to be more environmentally conscious?

**Response 57**

No. The Title V permit will include additional conditions to ensure compliance with the new federal emissions standards that will include, among other things, upgraded baghouses and lime injection to control acid gases.

**Comment 58 - Brent Hollingsworth and Richard Johnson**

Is there going to be an expansion to the building there?

**Response 58**

IDEM has not received an application for any expansion other than what has been proposed in this modification, namely the replacement of burners and addition of ladle heaters.

**Comment 59 - Richard Johnson**

Why isn't an environmental impact study done?

**Response 59**

Environmental impact studies are only required for projects receiving certain types of government funding. To the IDEM's knowledge Wabash Alloys has not received this type of funding.

Across the state for the past 30 years, IDEM has developed a State Implementation Plan under the Clean Air Act that assures that throughout the State the National Ambient Air Quality Standards are maintained or IDEM will bring areas into compliance. In the last 25 years, IDEM has brought more than a dozen areas that were previously out of compliance with the health-based standards into compliance with the State Implementation Plan. The State Implementation Plan now shows that Tipton County meets all those National Ambient Air Quality Standards.

With respect to requiring an environmental impact study prior to approving a new modification, IDEM does have a program like that for much larger sources of air pollution than what Wabash Alloys emits. The program is called the Prevention of Significant Deterioration (PSD). The program requires that the source establish what the air quality levels are now and requires that the source makes a rigorous demonstration that their new project will not cause or contribute to violations of the standards. Smaller sources and modifications of existing sources are not subject to this requirement. However, the IDEM did perform computer-based modeling to evaluate the air quality impacts of this modification.



As shown in Response 21, the proposed change will not cause or contribute to a violation of the lead standard. The actual emissions increase associated with this change are very small.

**Comment 60 - Morris Stillabower**

I understand that Wabash wants to go from being a minor emitter to a major emitter because of the HCl problem they have. If they go from being a minor emitter to a major emitter, what is going to happen on all the other categories of pollution that they are allowed to emit from their plant? Will they be loosened up to major emitter status on all the other categories?

**Response 60**

It is doubtful that anything would increase because of the new national emission standard for hazardous air pollutants since this new rule will be more stringent than what is already required for particulate matter. Wabash Alloys is not asking for the emissions of hydrochloric acid to be increased. Wabash Alloys is just asking for a limit to be established that is not even established in their current permit, and a level that reflects IDEM's best estimate of what the emissions are. Wabash Alloys did not request any relaxation of any other limits. They are just focusing on a realistic limit on hydrochloric acid emissions.

If Wabash Alloys desires to remain a minor source pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) in their Part 70 Operating Permit, then the emission limits for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC of one hundred (100) tons per year will be incorporated since this source is one of the twenty-eight (28) listed source categories under 326 IAC 2-2.

**Comment 61 - Morris Stillabower**

Is Wabash Alloys allowed and able to petition IDEM to increase their other limits?

**Response 61**

Wabash Alloys can submit an application for modifications to their plant in the future. Each application will be thoroughly reviewed to assure that Wabash Alloys complies with all Federal and State laws. Note the new NESHAP sets firm limits on particulate matter emissions. Wabash Alloys can request modifications under the new source review program and depending on the magnitude of the increases in emissions may be required to meet the Prevention of Significant Deterioration requirements pursuant to 326 IAC 2-2 or best available control technology for VOC emissions pursuant to 326 IAC 8-1-6.

**Comment 62 - Morris Stillabower**

So for the new limits that are coming out in 2003, I understand, you are going to have -- still have two categories but they are going to be shifted from what they are today. Today you have low emitter and high emitter, in 2003 you are going to have low emitter and high emitter, but those will be more stringent in the future. Is that what I am kind of understanding here?

**Response 62**

The pollutants that are regulated by this new rule, which are the ones that U.S. EPA is most concerned about from this type of plant, will probably decrease. Wabash Alloys will probably need to make improvements to their overall control systems in order to get in compliance with this rule before March 2004, a one-year extension granted by IDEM. If improvements are made to their baghouse in order to come into compliance with this rule, then their emissions are going to have to decrease.

The new National Emissions Standard for Hazardous Air Pollutants applies to Wabash Alloys because Wabash Alloys and IDEM now thinks Wabash Alloys is a major source of hydrochloric acid emissions. The rule requires Wabash Alloys to upgrade the control equipment and bring their hydrochloric acid emissions down. Even if the controls bring their emissions down to being a minor source, Wabash Alloys has to comply with the NESHAP. The NESHAP also applies to minor sources for some of the organic emissions that will also likely require a baghouse to comply. This portion of the NESHAP is applicable whether Wabash Alloys is at a major source level or at a minor source level.

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Part 70 Significant Source Modification**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Wabash Alloys, L.L.C.</b>
<b>Source Location:</b>	<b>841 South 550 West, Tipton, Indiana 46072</b>
<b>County:</b>	<b>Tipton</b>
<b>SIC Code:</b>	<b>3341</b>
<b>Operation Permit No.:</b>	<b>T 159-14125-00008</b>
<b>Operation Permit Issuance Date:</b>	<b>March 12, 2001</b>
<b>Significant Source Modification No.:</b>	<b>SSM 159-14206-00008</b>
<b>Permit Reviewer:</b>	<b>Mark L. Kramer</b>

The Office of Air Quality (OAQ) has reviewed a modification application from Wabash Alloys, L.L.C. relating to the construction and operation of the following emission units and pollution control devices:

- (a) Two (2) natural gas-fired with oxy-fuel backup fuel, rated at 16.0 million British thermal units per hour each, to replace the burners rated at 24 million British thermal units per hour total for the existing reverbatory furnace #1, equipped with existing north and south baghouses, exhausting through Stacks #2 and #3.
- (b) Two (2) natural gas-fired with oxy-fuel backup fuel, rated at 16.0 million British thermal units per hour each, exhausting to Stack #5, to replace the burners rated at 24 million British thermal units per hour total for the rebuilt reverbatory furnace #2.
- (c) Seven (7) natural gas-fired ladle heaters/pot stands, rated at 2.0 million British thermal units per hour, each.

#### **History**

On March 28, 2001, Wabash Alloys, L.L.C. submitted an application to the OAQ requesting to replace the burners on their existing plant reverbatory furnaces, and to add seven (2) ladle heaters. A dedicated stack for the combustion emissions is proposed for reverbatory furnace #2. The charge capacity and the melt rates of the existing reverbatory furnace #1 and proposed rebuilt reverbatory furnace #2, constructed in November 1993, are not being changed by this proposed modification. The entire source was a minor PSD source because potential to emit after controls was under one hundred (100) for all criteria pollutants. Therefore, none of the other operations downstream of the furnaces are being modified and the potential to emit has changed due to the new combustion units.

The existing source is currently operating under a FESOP, F159-5547-00008, issued on December 9, 1996 and has submitted a Part 70 Operating Permit application on March 12, 2001. The replacement burners and new ladle heaters/pot stands that are proposed in this modification are being reviewed under the Part 70 Operating program and will be incorporated into the Part 70 Operating Permit. The existing units comply with the FESOP.

### Existing Approvals

The source applied for a Part 70 Operating Permit T 159-14125-00008 on March 12, 2001. The source has been operating under previous approvals including, but not limited to the following:

- (a) F 159-5547-00008, issued on December 9, 1996, and
- (b) AAF 159-9179-00008, issued on December 17, 1997.

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
#5	Combustion Only Two (2) burners for Reveratory Furnace #2	50.0	4.0	37,000	700

### Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 28, 2001. Additional information was received on May 23 and 25, 2001.

### Emission Calculations

See pages 1 and 2 of 2 of Appendix A of this document for detailed emissions calculations. Oxy-fuel results in lower emissions  $\text{NO}_x$  emissions than natural gas and therefore, the natural gas combustion represents the worst case.

### Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls from the proposed new and replacement combustion facilities. It does not reflect any process emissions which are not changed by this proposed modification. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.618
PM <sub>10</sub>	2.47
SO <sub>2</sub>	0.195
VOC	1.79
CO	27.3
NO <sub>x</sub>	32.5

HAPs	Potential To Emit (tons/year)
Benzene	0.0007
Dichlorobenzene	0.0004
Formaldehyde	0.024
Hexane	0.586
Toluene	0.001
Lead Compounds	0.0002
Cadmium Compounds	0.0004
Chromium Compounds	0.0005
Manganese Compounds	0.0001
Nickel Compounds	0.0007
TOTAL	0.614

#### Justification for Modification

- (a) Fugitive Emissions  
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) emissions are counted toward determination of PSD applicability.
- (b) The source is currently operating under FESOP (F 159-5547-00008) issued December 9, 1996 and has applied for a Part 70 Operating Permit on March 12, 2001.
- (c) A Part 70 Significant Source Modification to a yet to be issued Part 70 Operating Permit is proposed because the potential to emit NO<sub>x</sub> before controls of this modification exceeds twenty five (25) tons per year. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4).
- (d) The approval of this Significant Source Modification will allow the source to construct and operate since the Part 70 Operating Permit for this source has not been issued yet.

### County Attainment Status

The source is located in Tipton County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Tipton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Tipton County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 100
PM <sub>10</sub>	less than 100
SO <sub>2</sub>	less than 100
VOC	less than 100
CO	less than 100
NO <sub>x</sub>	less than 100

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of one hundred (100) tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon TSD and Addendum to the TSD for F 159-5547-00008.

### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Proposed Modification	0.379	1.51	0.195	1.79	27.3	32.5	0.614
PSD Threshold Level	100	100	100	100	100	100	-

Note that PM and PM<sub>10</sub> emissions from the proposed replacement burners associated with reverbratory furnace #1 are controlled by existing baghouses.

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply. The source will retain its minor PSD status.

The existing emission units will retain their FESOP emission limits of less than one hundred (100) tons per year for each criteria pollutant.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This existing source currently is operating under a FESOP which expires on December 9, 2001 and has submitted their Part 70 (T 159-14125-00008) application on March 12, 2001. The addition of four (4) burners and seven (7) ladle heaters being reviewed under this permit shall be incorporated in the submitted Part 70 application. The source will require a Part 70 Operating Permit because of the upcoming change in the emission factor for hydrochloric acid emissions, a HAP, associated with the MACT for secondary aluminum production. Currently, the source is complying with the HAP emission limits of their FESOP.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.

### State Rule Applicability - Individual Facilities

#### 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The proposed modification of this existing PSD minor source is not subject to the requirements of 326 IAC 2-2. The source will require a Part 70 Operating Permit because of the upcoming change in the emission factor for hydrochloric acid emissions, a HAP, associated with the MACT for

secondary aluminum production. Currently, the source is complying with the HAP emission limits of their FESOP.

326 IAC 2-4.1-1 (New source toxics control)

The potential single and combination HAPs emissions from the proposed modification are not major for HAPs and thus this rule does not apply.

**Compliance Requirements**

There are no compliance monitoring requirements for these natural gas/oxy-fuel combustion units. Since potential PM and PM<sub>10</sub> emissions from the natural gas combustion that are controlled by the baghouses are less than one (1) ton per year, no compliance monitoring conditions need to be specified for these facilities. Note the same baghouses associated with the replacement burners still have compliance monitoring requirements specified in the FESOP because they are associated with the process emissions.

**Conclusion**

The construction and operation of the rebuilt reverberatory furnace #2, four (4) natural gas with oxy-fuel back-up burners and the seven (7) ladle heaters/ pot stands shall be subject to the conditions of the attached proposed Significant Source Modification No. 159-14206-00008.



**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Small Industrial Boiler**

Page 1 of 2 TSD App A

**Company Name: Wabash Alloys L.L.C.  
Address City IN Zip: 841 South 550 West, Tipton, Indiana 46072  
Source Modification: 159-14206  
Pit ID: 159-00008  
Reviewer: Mark L. Kramer  
Date: March 28, 2001**

Reverbatory Furnace # 1 replacing 24 mmBtu/hr with two (2) 16 mmbtu/hr burners, equipped with North and South Baghouses.

Heat Input Capacity	Potential Throughput	Control				
MMBtu/hr	MMCF/yr	Efficiency				
32.0	266.97	94.47%				
Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.254	1.01	0.080	13.3	0.734	11.2
Potential Emissions After Controls in tons/y	0.014	0.056	0.080	13.3	0.734	11.2

**Reverbatory Furnace #2, rebuilt and replacing 24 mmBtu/hr with two (2) 16 mmBtu/hr burners  
Seven (7) ladle heater/pot stands @ 2 mmBtu/hr each**

Heat Input Capacity MMBtu/hr 46.0	Potential Throughput MMCF/yr 383.77					
Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
	**see below					
Potential Emission in tons/yr	0.365	1.46	0.115	19.2	1.06	16.1
Potential Emissions After Controls in tons/y	0.365	1.46	0.115	19.2	1.06	16.1
Total						
Potential Emission in tons/yr	0.618	2.47	0.195	32.5	1.79	27.3
Potential Emissions After Controls in tons/y	0.379	1.51	0.195	32.5	1.79	27.3

**Methodology**

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,050 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**

**Page 2 of 2 TSD App A**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler**

**HAPs Emissions**

**Company Name: Wabash Aloys L.L.C.**  
**Address City IN Zip: 841 South 550 West, Tipton, Indiana 46072**  
**Source Modification: 159-14206**  
**Pit ID: 159-00008**  
**Reviewer: Mark L. Kramer**  
**Date: March 28, 2001**

Total HAPs Based on 650.7 MMCF/yr

**HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	6.833E-04	3.904E-04	2.440E-02	5.857E-01	1.106E-03

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	1.627E-04	3.579E-04	4.555E-04	1.236E-04	6.833E-04	0.614

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Small Industrial Boiler**

**Page 1 of 2 TSD App B**

**Company Name:** Wabash Aloys L.L.C.  
**Address City IN Zip:** 841 South 550 West, Tipton, Indiana 46072  
**Source Modication:** 159-14206  
**Plt ID:** 159-00008  
**Reviewer:** Mark L. Kramer  
**Date:** November 14, 2001

**Net Emission Increase**

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

30.00

250.29

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.238	0.951	0.0751	**see below	0.688	10.512

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,050 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Natural Gas Boiler  
HAPs Emissions**

**Page 2 of 2 TSD App B**

**Company Name: Wabash Aloys L.L.C.  
Address City IN Zip: 841 South 550 West, Tipton, Indiana 46072  
Source Modic159-14206  
Plt ID: 159-00008  
Reviewer: Mark L. Kramer  
Date: November 14, 2001**

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	0.00026	0.00015	0.00939	0.22526	0.00043

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	0.0000626	0.00014	0.00018	0.00005	0.00026	0.236

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.  
Additional HAPs emission factors are available in AP-42, Chapter 1.4.